

# Gadfly's voodoo economics

The Bethlehem Gadfly Parking, Serious Issues October 1, 2019

*(124th in a series of posts on parking)*

**Fine Recommendation Memo 8.20.19**

**The July 2 pro forma**

Gadfly was expecting disappointment.

So he was not disappointed.

It would have been nice to have awoken this morning to a mailbag full of solutions to the math homework problem he posed yesterday afternoon.

*Is there a way to re-vision the mix of meter rates and fines to put the onus on the violators through even heavier fines, while easing the recent meter increase on the law-abiding residents?*

Put more simply, the goal was to see if it were feasible to roll the parking meter rates back to \$1.00/hr. while voting on a new fine structure:

penalizing the law-breakers,

giving a break to the law-abiders,

and providing the Bethlehem Parking Authority a fair financial shake.

In its proposal linked above, the BPA estimates that their fine recommendations will produce a meter revenue increase of \$75,000-\$100,000 annually.

In the “pro forma” the BPA presented at Council July 2, also linked above, that figure for meter revenue increase is \$292,378.

Gadfly doesn’t understand the difference (and wonders if he is misunderstanding the chart), but let’s use the higher figure for our mathematizing here.

Now listen up everybody. Let’s see if Gadfly is thinking straight.

Here’s how he states the proposition.

*The goal is to keep the meter rate at \$1.00/hr. How much would the fine revenue have to be increased to enable that to happen and still produce \$292,378 in income for the BPA?*

Whew!

Now for some voodoo economics.

Here is an image from the pro forma linked above showing columns from 2018 (when the meter rates were \$1.00/hr.) and 2019 (when the meter rates are \$1.50/hr.). The 2019 column also shows the proposed fine increase, though it actually hasn’t gone into effect.

The bottom circled section shows the increased meter revenue of \$292,378.

	Fiscal Year Ending 12/31 Year	(Estimated) 2018 0	(Projected) 2019 1
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#### SUMMARY OF ASSUMPTIONS

<b>ON-STREET METER RATE INCREASES</b>			
1)	Initial Rate	\$1.00	\$1.00
2)	Increase		\$0.50
3)	Ending Rate	\$1.00	\$1.50
4)	Gross Growth Rate		50.0%
5)	Elasticity Adjustment		80%
6)	Net Growth Rate Due to Increase in Rate		40.0%
<b>VIOLATIONS RATE INCREASES</b>			
7)	Initial Average Rate	\$10.00	\$10.00
8)	Increase		\$5.00
9)	Ending Average Rate	\$10.00	\$15.00
10)	Assumed Average Number of Violations	79,248	62,942
11)	% Increase or (decrease)		(20.6%)
12)	Gross Combined Growth Rate		
13)	Elasticity Adjustment		
14)	Net Growth Rate on Budget Due to Increase in Rate		
<b>GARAGE TRANSIENT RATE INCREASES</b>			
15)	Initial Rate	\$1.00	\$1.00
16)	Increase		
17)	Ending Rate	\$1.00	\$1.00
18)	Gross Growth Rate		
19)	Elasticity Adjustment		
20)	Net Growth Rate on Budget Due to Increase in Rate		
<b>GARAGE MONTHLY CONTRACT RATE INCREASES</b>			
21)	Walnut Street Garage		
22)	North Street Garage		
23)	Lehigh Riverport Garage		
24)	Commons Garage		
25)	Surface Lots		
26)	New Street Garage		
27)	Polk Street Garage		
<b>FINANCING ASSUMPTIONS</b>			
28)	Polk Street Garage Project Fund		16,800,000
29)	Walnut St Project Fund		

#### SUMMARY OF RESULTS

<b>REVENUES</b>			
30)	Meters	1,976,547	2,268,925
31)	Parking Violations - Total	1,439,473	1,487,193
32)	Garage revenue	2,475,949	2,394,506
33)	Other revenue	548,872	537,639
34)	<b>TOTAL REVENUES</b>	<b>6,440,841</b>	<b>6,688,263</b>

The top circled section shows an assumed number of violations as 62,942.

According to Voodoo Gadfly's thinking, if you divide 62,942 into \$292,378, you get the amount you would have to raise the fines on each violation to break even.

\$4.645197165644562

(If we used BPA's lower figure of, say, \$100,000 as a target figure instead of almost \$300,000 in the pro forma, then presumably the fine increase on each violation would only have to be 1/3 of \$4.645197165644562.)

Now Gadfly pauses to see if he gets slapped upside the head for faulty thinking here.

If this thinking passes muster, then the question is would rolling the meter rate back to \$1.00/hr. and raising the fine for a meter violation to *at most* \$20 be ok?

BPA is now proposing raising the fine for a meter violation to \$15. Would *at most* \$20 be ok or seen as excessive?

Maybe worth a conversation. Gadfly can see arguments on both sides.

Remember this from Desman, the BPA consultant: "Parking industry standards suggest that the fine for non- payment of a parking meter or other parking meter violations be priced at least 10- 15 times the hourly parking rate."

The BPA proposal before Council raises the violation rate (from the base of \$1.00/hr.) to 15 times the hourly parking rate.

But “*at least 10- 15 times*” would seem to indicate that at most 20 times wouldn’t cause apoplexy.

Gadfly, of course, may be way, way, way off in his mathematizing here. But his purpose is simply to stir thought about options to the BPA proposal.

The prime reason, says BPA, for raising the rate is that the present fine structure is not a deterrence to bad behavior. A good reason. So let’s punish the bad behaviorers.

To Gadfly, raising the rate because we will not look bad in comparison to our peers is not so good a reason.

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